

INSPECTION REPORT

Inspection Entry Date/Time	03/21/2024 10:00 AM (PT)	Announced: Yes	
Inspection Exit Date/Time	03/21/2024 01:45 PM (PT)	Access: Granted	
Weather	54°F, Overcast		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection		
Permittee Name	City of Puyallup		
Facility Name	Puyallup STP		
Facility Address	1602 18Th St NW		
City, State, Zip Code	Puyallup, Washington 98371		
County	Pierce		
Facility GPS Coordinates	47.205597, -122.321317		
FRS ID	110005344699		
Permit Number	WA0037168		
SIC	4952 (Sewerage Systems)		
NAICS	221320 (Sewage Treatment Facilities)		
Lead Inspector:			
Raymond Andrews	EPA Region 10	andrews.raymond@epa.gov	(206) 553-4252
Supervisor Review:			
Peter Contreras	EPA Region 10	contreras.peter@epa.gov	(206) 553-6708

SECTION I – Opening Conference

I arrived at the Puyallup Sewage Treatment Plant (the “Site” or “Facility”), located at 1602 18Th St NW, Puyallup, Washington, at 10:00 AM (PT) on 03/21/2024 for an announced inspection. I was accompanied by Nicolas Haddad, an Inspector in Training, who was there to observe inspection procedures. I presented my Inspector credentials to Dan Messier and informed him I was there to conduct an inspection to determine compliance with the Clean Water Act (CWA) and the facility’s National Pollutant Discharge Elimination System (NPDES) permit, permit # WA0037168. This report is based on information supplied by Mr. Messier, direct observations made by me, and records and reports maintained by the facility. In addition, information gathered prior to, or after, the inspection from a review of EPA, State, and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA REGION 10	Raymond Andrews	Lead Inspector	Yes	Yes
EPA Region 10	Nicolas Haddad	Inspector	Yes	Yes
City of Puyallup	Dan Messier	Water Pollution Control Plant Manager	Yes	Yes

Facility Information

Responsible Official?	Mayor Jim Kastama, jkastama@puyallupwa.gov
How many employees does the facility have and what are their certification levels?	The facility has 10 operators. A full staff would consist of 11 operators. The facility operators have the following treatment certification levels: Level 4 – 5 employees Level 3 – 1 employee Level 2 – 2 employees Level 1 – 2 employees
When is the facility staffed?	The facility is staffed 24-hours/day, 7-days/week including holidays.
What is the facility's service population?	The facility services approximately 44,000, which includes some residents in the unincorporated portion of Pierce County.
Are there shared, or contributing, jurisdictions?	The facility receives wastewater from a portion of unincorporated Pierce County.
What is the facility's design capacity and average daily flow?	The facility has a design capacity of 13.98 million gallons per day (MGD) with a current average daily flow of 3.9 MGD.
Describe the facility's flow path.	The influent enters the facility at the headworks. It passes through a 4mm rotating screen to remove solids. The influent then flows through the primary clarifiers. The facility has four rectangular clarifiers, but they are not all operating at the same time. The facility can direct flow to individual clarifiers as necessary. In winter, the facility maintains two clarifiers in operation while only one is in operation during the summer. From the primary clarifiers, the influent goes to the activated sludge basins. The influent flows from the sludge basin to one of the two secondary clarifies, both of which are always in operation. From the secondary clarifiers, the effluent goes through the UV treatment facility followed by discharge into the Puyallup River. When the facility “wastes” sludge, it goes through a rotating drum thickener. From the rotating drum, the solids go through two

	digesters. The solids go into the primary digester followed by the secondary digester. From the digesters, the solids go to a sludge holding tank. From the holding tank, the solids go into a screw press for de-watering. From the press, the solids go into a silo. From the silo, the solids are loaded onto a truck. The solids are taken to Eastern Washington by a third-party vendor for agricultural purposes.
How many outfalls does the facility maintain?	The facility discharges through a single outfall into the Puyallup River.
How often is the outfall visually inspected?	The outfall is submerged in the middle of the Puyallup River. A diver is contracted to inspect the outfall periodically but there is no set schedule. The outfall was last inspected on September 15, 2021. The Dive Report indicated no problems associated with the outfall.
Are there any industrial users?	The facility has two industrial users, Cintas and Unifirst. Both users are commercial laundry services. Both facilities pre-treat their prior to sending it to the WWTP. There are no known issues due to industrial user inputs.
Does the facility accept waste from septage haulers?	The facility does not accept any waste from septage haulers.
Does the facility have a failure alarm?	The facility has a failure alarm that alerts the plant operators on duty through the dedicated cell phones they carry while working. The alarm also sends an alert to the Supervisory Control and Data Acquisition (SCADA) system.
Does the facility have back-up power?	The facility has back-up generators that automatically engage if the system senses power has been lost. All operational components of the facility are on back-up power.
What is the facility's primary flow measuring device?	The facility's influent flow is measured by a Parshall Flume. Effluent flow is measured by a magnetic flow meter. Both measuring devices are calibrated annually. The facility does not have any secondary flow measuring devices.
Are water samples analyzed in-house or by contract laboratory?	The facility analyzes Biochemical Oxygen Demand (BOD), Total suspended solids (TSS), Fecal coliform, Total Ammonia, pH, flow, and temperature in-house. Copper, acute & chronic whole effluent toxicity, hardness, arsenic, phosphorus, nitrogen, and Total Kjeldahl Nitrogen (TKN) are analyzed by the contract lab. The contract laboratory information is: ALS Environmental 1317 South 13 th Avenue Kelso, Washington 98626 (360) 577-7222
Has the facility had any bypasses or overloads in the past 5-years?	The facility has not had any bypasses or overloads in the past 5-years.
Has the facility been renovated or upgraded in the last 5-years?	The facility installed an ultraviolet (UV) treatment system in 2021.
Are there any plans to renovate or upgrade the facility?	The facility will be adding a 3rd secondary clarifier. The project is out for construction bidding.

SECTION II – Observations

No areas of concern were observed during the site tour.

SECTION III – Records Review

Records may not be in sequential order.

Record: Laboratory Analysis Reports		AOC: No
Ref #: RA1-RR-010	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
At the time of inspection, I reviewed the facilities laboratory reports and associated chain-of-custody documents from January 2021 through February 2023. The reports and chain-of-custody documents appeared to be accurate and complete.		
Record: DMR Reports		AOC: No
Ref #: RA1-RR-009	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
At the time of inspection, I reviewed the facilities Discharge Monitoring Reports (DMRs) from January 2021 through February 2023. The reports appeared to be accurate and complete.		
Record: Other - 2023 Mercury Minimization Plan Annual Status Report		AOC: No
Ref #: RA1-RR-008	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
At the time of the inspection, I reviewed the facility's Mercury Minimization Plan Annual Status Report, dated January 11, 2024. The report met the requirements of the permit.		
Record: Other - 2019 Surface Water Monitoring Report		AOC: No
Ref #: RA1-RR-007	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
At the time of the inspection, I reviewed the facility's May 2019 Surface Water Monitoring Report. The report met the requirements of the permit.		
Record: Other - EPA Warning Letter		AOC: No
Ref #: RA1-RR-006	Reviewed By: Raymond Andrews	Reviewed Date: 03/08/2024
Pre-inspection, I reviewed a Warning Letter EPA issued to the facility on March 17, 2021. The Warning Letter informed the facility of the violations, i.e., areas of concern, found during the Desk Audit of July 23, 2020.		
Record: Other - EPA Off-Site Monitoring Compliance Desk Audit Report		AOC: No
Ref #: RA1-RR-005	Reviewed By: Raymond Andrews	Reviewed Date: 03/08/2024
Pre-inspection, I reviewed a Desk Audit conducted by former EPA Inspector Rachel Stephenson on July 23, 2020. As part of the site review, the Inspector reviewed information in EPA's Integrated Compliance Information System (ICIS) database and found the facility had 63 exceedances of "Copper, total recoverable". The Inspector also found the facility did not submit a complete Discharge Monitoring Report (DMR) for the December 2018 monitoring period. The DMR was missing water temperature data.		
Record: Other - EPA's Integrated Compliance Information System (ICIS) Database		AOC: Yes
Ref #: RA1-RR-004	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
As part of the inspection, I reviewed data in EPA's Integrated Compliance Information System (ICIS) Database covering the period from March 1, 2019, through February 29, 2024.		
The facility exceeded its effluent permit limits three times during the time period reviewed.		

Record: Other - Operations & Maintenance Plan		AOC: Yes
Ref #: RA1-RR-003	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
I reviewed the facility's Operation & Maintenance (O&M) plan, dated July 2001. Per Mr. Messier, the facility upgraded to UV disinfection in 2021, but the O&M plan was not updated to show where information on the UV system could be obtained. The O&M plan has not been updated since the UV disinfection system was installed.		
Record: Other - Quality Assurance Plan		AOC: Yes
Ref #: RA1-RR-002	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
I reviewed the facility's Quality Assurance (QA) plan, which had a revision date of March 2024. The QA plan did not contain information on the training and qualification of facility personnel or the sample shipping methods and laboratory data delivery requirements.		
Record: Other - Outfall Inspection Report		AOC: No
Ref #: RA1-RR-001	Reviewed By: Raymond Andrews	Reviewed Date: 03/21/2024
I reviewed the facility's outfall inspection report, dated September 27, 2021. The facility's sole outfall is submerged in the middle of the Puyallup River. The outfall was inspected by a diver on September 15, 2021. The diver determined the outfall was intact and in good condition.		

SECTION IV – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION V - AREA OF CONCERN

Areas of Concern may not be in sequential order. The presentation of Areas of Concern does not constitute a formal compliance determination or violation.

AOC Reference #: RA1-RR-002	Records Review: Other - Quality Assurance Plan
Permit Requirement Part II.F.3.a states that at a minimum the QA Plan must include "...sample shipping methods, and laboratory data delivery requirements."	
AOC: The QA plan did not contain the sample shipping methods and laboratory data delivery requirements.	
AOC Reference #: RA1-RR-002	Records Review: Other - Quality Assurance Plan
Permit Requirement Part II.F.3.c states that at a minimum the QA Plan must include the "...Qualification and training of personnel."	
AOC: The QA plan did not include information on the training and qualification of facility personnel.	
AOC Reference #: RA1-RR-003	Records Review: Other - Operations & Maintenance Plan
Permit Requirement Part II.E of the permit states, in part, "Any changes occurring in the operation of the plant shall be reflected within the Operation and Maintenance plan."	
AOC: The O&M plan has not been updated since the UV disinfection system was installed.	

AOC Reference #: RA1-RR-004	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database																								
Permit Requirement Part I.B. 1 of the permit states, "The permittee must limit and monitor discharges from outfall 001 as specified in Table 1, below. All figures represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits in the tables at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit."																									
AOC: The facility exceeded its effluent permit limits three times during the period reviewed as shown in the table below: <table><tr><th>Monitoring Period</th><th>Parameter</th><th>DMR Value</th><th>Permit Limit</th><th>Unit</th><th>Limit Type</th></tr><tr><td>January 2020</td><td>Copper, total recoverable</td><td>9.4</td><td>8.5</td><td>ug/L</td><td>Mo Avg</td></tr><tr><td>January 2021</td><td>Solids, total suspended</td><td>54.7</td><td>45.</td><td>mg/L</td><td>Wkly Avg</td></tr><tr><td>January 2021</td><td>Solids, total suspended</td><td>4040.</td><td>3499.</td><td>lb/d</td><td>Wkly Avg</td></tr></table>		Monitoring Period	Parameter	DMR Value	Permit Limit	Unit	Limit Type	January 2020	Copper, total recoverable	9.4	8.5	ug/L	Mo Avg	January 2021	Solids, total suspended	54.7	45.	mg/L	Wkly Avg	January 2021	Solids, total suspended	4040.	3499.	lb/d	Wkly Avg
Monitoring Period	Parameter	DMR Value	Permit Limit	Unit	Limit Type																				
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January 2021	Solids, total suspended	4040.	3499.	lb/d	Wkly Avg																				

SECTION VI – Closing Conference

I held a closing conference with facility personnel at 01:45 PM (PT) on 03/21/2024. During the closing conference, I discussed the observations and Areas of Concern identified during the inspection. I told the facility representatives the Areas of Concern have not yet been evaluated for a formal compliance determination.

SECTION VII – List of Appendices

1. Photo Log

APPENDIX 1: Photo Log

All photos were taken by Lead EPA Inspector, Ray Andrews, during the inspection.

Photos were not manipulated beyond minor cropping for sizing and labels or callouts to draw attention to the subject of the photo.

All photos taken during the inspection are included in the Photo Log; however, only photos that support an Observation or Area of Concern are included in the inspection report.

P1010901 – Influent Auto-Sampler

P1010902 – Influent Auto-Sampler Control Panel

P1010903 – Effluent Auto-Sampler

P1010904 – Effluent Auto-Sampler Control Panel

P1010905 – pH Meter Readout and Control Panel

P1010906 – Ph Meter and Probe

P1010907 – ph Meter Calibration Log

P1010908 – pH Meter Cleaning Log